

The Commonwealth of Massachusetts

ANNUAL REPORT

OF THE

TRUSTEES OF THE GRAFTON
STATE HOSPITAL

FOR THE

YEAR ENDING NOVEMBER 30, 1921

DEPARTMENT OF MENTAL DISEASES



BOSTON
WRIGHT & POTTER PRINTING CO., STATE PRINTERS
32 DERNE STREET

The Commonwealth of Massachusetts

ANNUAL REPORT

OF THE

TRUSTEES OF THE GRAFTON
STATE HOSPITAL

FOR THE

YEAR ENDING NOVEMBER 30, 1921

DEPARTMENT OF MENTAL DISEASES



BOSTON
WRIGHT & POTTER PRINTING CO., STATE PRINTERS
32 DERNE STREET

PUBLICATION OF THIS DOCUMENT
APPROVED BY THE
SUPERVISOR OF ADMINISTRATION.

CONTENTS.

	PAGE
REPORT OF TRUSTEES	7
REPORT OF SUPERINTENDENT	9
REPORT OF TREASURER	17
STATISTICS	27

OFFICERS OF THE HOSPITAL.

BOARD OF TRUSTEES.

FRANK B. HALL, <i>Chairman</i>	.	.	.	.	WORCESTER.
MARGARET A. CASHMAN, <i>Secretary</i>	.	.	.	.	NEWBURYPORT.
WINSLOW P. BURHOE	.	.	.	.	BOSTON.
FRANCIS PRESCOTT	.	.	.	.	GRAFTON.
ERNEST L. ANDERSON	.	.	.	.	WORCESTER.
ENOS H. BIGELOW, M.D.	.	.	.	.	FRAMINGHAM.
FLORA M. CANGIANO	.	.	.	.	HINGHAM.

RESIDENT OFFICERS.

HARLAN L. PAINE, M.D.	.	.	.	.	<i>Superintendent.</i>
HIRAM L. HORSMAN, M.D.	.	.	.	.	<i>Assistant Superintendent.</i>
MARY JOHNSON, M.D.	.	.	.	.	<i>Assistant Physician.</i>
H. WILBUR SMITH, M.D.	.	.	.	.	<i>Assistant Physician.</i>
JAMES L. McAUSLAN, M.D.	.	.	.	.	<i>Assistant Physician.</i>
BUELL L. ASHMORE, M.D.	.	.	.	.	<i>Assistant Physician.</i>
JOHN McRAE	.	.	.	.	<i>Steward.</i>
SUSIE G. WARREN	.	.	.	.	<i>Treasurer.</i>

CONSULTING SURGEON.

LEMUEL F. WOODWARD, M.D.	WORCESTER.
--------------------------	---	---	---	---	------------

DENTIST.

BURTON E. LORING, D.M.D.	WORCESTER.
--------------------------	---	---	---	---	------------

The Commonwealth of Massachusetts

TRUSTEES' REPORT.

To His Excellency the Governor and the Honorable Council.

The Trustees of the Grafton State Hospital herewith submit the forty-fourth annual report, with the report of the superintendent and the treasurer appended.

It gives the Board of Trustees great pleasure to report that the vacancy, in the position of superintendent at the hospital, has been ably and satisfactorily filled by the appointment of Dr. Harlan L. Paine of Massachusetts as superintendent of the Grafton State Hospital. Dr. Paine, who was chief executive officer of the Boston Psychopathic Hospital, assumed charge at Grafton on Sept. 15, 1921.

During the short time that he has been in charge he has proven to be an energetic and efficient administrator.

A permanent water supply for the hospital is now under construction. It is hoped that by the end of another year an ample supply for all purposes will be available.

The hospital having inadequate fire protection, plans are under way to remedy this undesirable condition.

The vegetable cellar is practically completed, and is being used for the storage of vegetables harvested this year.

The employee situation is much improved.

A new interest has been awakened in the improvement of the wards, and many of the patients are working to beautify and adorn them. This interest and activity will be of great benefit to the patients, and will result in their surroundings being more attractive and homelike.

The Board wishes to again call to your attention the urgent need of a chapel and assembly hall at Grafton. An appropriation has been asked for this purpose annually since 1916, and

each succeeding year finds the need more imperative. The Board strongly urges, in view of the necessity of such an accommodation for the 1,500 patients now being cared for at the hospital, that the appropriation will be granted the coming year.

The ice and wind storm of the present week has been very disastrous to Grafton. The hospital has been without lights and without telephone service; wires and poles are down and a large number of trees are ruined.

We recommend the following appropriations for the coming year: —

Barn for hay storage	\$5,600 00
Barn for 60 cows, one wing (material, \$6,000; equipment, \$2,100)	8,100 00
Barn for hay storage (Oaks Group)	2,500 00
Sheds for farm tools and implements	3,500 00
Cottage for steward	5,000 00
Chapel and assembly hall	135,000 00
Sewerage connections, store house, power house, carpenter shop	2,400 00
Scales, 10-ton capacity	300 00
	—
	\$162,100 00

FRANK B. HALL.

WINSLOW P. BURHOE.

FRANCIS PRESCOTT.

ERNEST L. ANDERSON.

MARGARET A. CASHMAN.

FLORA M. CANGIANO.

ENOS H. BIGELOW.

SUPERINTENDENT'S REPORT.

To the Trustees of the Grafton State Hospital.

I herewith submit the forty-fourth annual report of the Grafton State Hospital for the year ending Nov. 30, 1921.

Appended to this report are the tables of statistics relative to patients for the year ending Sept. 30, 1921, and for your convenience a brief analysis of these tables is given, as follows: —

MOVEMENT OF THE POPULATION DURING THE YEAR.

At the beginning of the year there were 1,385 patients in the institution, 9 in family care under our supervision, 26 on visit, 33 on escape, making a total number of 1,453 on our books.

During the year 202 were admitted; 30 were discharged, 36 were transferred to other institutions, and 30 died, leaving at the end of the year 1,550 on our books, with 9 in family care.

The number of admissions exceeds the number admitted during the previous year by 122. The daily average number under our care and treatment was 1,486.76, exceeding by 9.13 the number for the previous year.

The number of patients received by transfer was 181, of which 78 came from Northampton, 93 from Westborough, 4 from Danvers, 2 from Bridgewater, 3 from Taunton and 1 from Medfield. Twenty-one were received from the community.

The average age of the patients admitted is 41.2 years.

Most of the cases transferred to us were suffering from dementia præcox in its various forms. Of those committed to us directly from the community practically all were suffering from epilepsy.

During the past month we have commenced to give intensive treatments with diarsenol to all cases which show positive

Wassermann. We have also purchased a large amount of laboratory equipment, and hope to have a clinical pathological laboratory before another year.

GENERAL HEALTH.

The general health of the hospital has been practically free from any contagious diseases. The following operations were performed during the year:—

Aspiration	1
Removal of part of bone of second phalanx	1
Removal of ovarian cyst	1
Laparotomy	1
Removal of necrosed bone from lower jaw	1

REPAIRS AND IMPROVEMENTS.

The concrete floor started in Elms C basement last year has been completed. A new toilet and lavatory in Oaks A have been installed with the necessary sewer connections.

The cow barn at the Oaks Group has been finished with asbestos wall board, and new ventilators installed. When the rotten sills are replaced it will be in good condition.

A new piggery 160 by 27 feet was completed November 28. This building is made of reinforced concrete, with air spaces in the walls. This piggery was very badly needed. It has, however, been found to be very cold and damp, due to the concrete floor, and it will be necessary to use a very large amount of shavings to keep it dry. It will also be necessary to install stoves to keep the place warm.

The incubators were changed from the basement of the grainery to the basement of the Oaks service building, making it possible to maintain a more uniform temperature and adding greatly to the convenience of caring for them.

The new road from the Oaks Group to the main highway was begun, and it is now open for traffic, and will probably be completed next year. It provides a shorter, level approach to this group.

A squash and onion room was built in the vegetable cellar this fall, ventilated trays being built which contain two

bushels each to care for the onions. Heat has been installed there, also a new floor in the second story, providing a large area for the storage of light materials.

The rough, unsightly area near the Elms Group is being leveled. This work has been done entirely by patients, and when completed will make a fine athletic field.

Hoods have been installed over kettles in the kitchen at the Elms service building.

One boiler has been retubed at the power house.

A new mangle was installed in the laundry, and a large disinfector purchased.

A pasteurizing equipment has been installed, and it is now working satisfactorily.

Thirty thousand feet of lumber were cut during the year.

Elms C, Elms service building, Elms cottage, Oaks C and D buildings have been entirely painted during the year. At Pines C, Ward 1, the day hall and dormitory have been repainted. Elms B has been partially repainted. Practically all the buildings need repainting. The painters have co-operated well in training patients in their line of work.

STAFF CHANGES.

Dr. Buell L. Ashmore came in March, 1921, having had previous State hospital experience in the Monson State Hospital. He also served in the army.

The training school has been conducted under the direction of Mrs. Ena Benson. Nine pupils graduated in September.

THE HERD.

The herd was tested and found, with the exception of one or two animals, to react to the test for tuberculosis. The calves that have been born this fall have been kept in small packing-box houses, isolated, and fed on pasteurized milk, and every precaution taken to keep them from coming in contact with infectious material. It is hoped that these calves will be a nucleus for a non-tubercular herd.

THE FARM.

In spite of the drouth the crops did very well, and more vegetables were harvested than in any previous year. A new tractor was purchased.

A new road has been laid out to the Pines and Willows Groups and construction started on this. This will do away with the road that now goes over the hill at the Pines Group, since this road has two very dangerous corners.

DENTAL REPORT.

The dental work has been under the direction of Dr. Burton E. Loring of Worcester, who has spent one day each week at the hospital. We have purchased another dental chair and engine, and are planning to have a dental office in both the female and male departments. This, because of the distance between buildings, will enable the dentist to accomplish a great deal more than he is able to do at the present time.

The following is a report of the operations of the dentist during the past year. There is no question but what a full-time dentist could be used to advantage.

Roots extracted	242
Teeth extracted	128
Fillings	114
Cleanings	51
Treatments	26
Examinations	23
Plates made and repaired	13

One male patient was found to be suffering from necrosis of bone of the lower jaw. He was operated on by Dr. Samuel Woodward, visiting surgeon, and a portion of the bone of his jaw was removed.

REMARKS AND RECOMMENDATIONS.

There is need of a topographical survey before any construction work can be done in road planning, grading and in making tunnels for steam and for the use of patients. Our present sewer lines are a constant source of trouble; some

run on embankments built to support them, others have been found 15 feet below the surface covered with a rocky filling. Our longest line is said to have a drop of 1 inch every 500 feet.

Our patients, three times a day, must go to their dining rooms, out of doors, in all kinds of weather, and there is a constant menace that some will run away. It is almost impossible to find a patient in this wild country if they have a few minutes' start; this is especially true at night.

Our steam lines should be laid in proper tunnels. Several lines were installed only as temporary lines, one having served for years, although originally installed to dry plaster in the building. The steam line between Pines B and the power house was in very bad condition, and has been entirely replaced. It was even necessary to replace all of the Akron pipe which it was laid in.

There is great need of articles for ornamentation of the ward, there being very few pictures, rugs or curtains. Several hundred unframed pictures and engravings were purchased from a second-hand store for a small sum of money. We also purchased 5,000 feet of unfinished molding. From this material pictures are being made by patients.

There is a great need for electric blowers to rid our mangle room and kitchens from steam. The means originally provided are wholly inadequate, and it is impossible to see more than a few feet in our kitchens when the steam cookers are being used.

The wooden flooring over the bread ovens should be protected from fire, and new flues installed.

There is a great need of a new cow and horse barn at the Main Group. Ten thousand four hundred dollars were appropriated to build one wing of the cow barn last year, but was not used; an additional sum of \$13,700 is asked in order that a full-sized cow barn may be built.

On September 26 a neighbor's barn was burned, and it was found to have been set on fire by a patient, and that this patient was the cause of several fires in this vicinity during the past year. This patient has since been transferred to the Bridgewater State Hospital. As may be surmised, the attitude of the community toward the institution is very bad, and an effort is being made to change this.

The matter of parole for patients was checked, and all parole patients are supposed to be on their wards immediately following supper. Parole was withdrawn from patients considered not fit to have it, and the custom of turning patients loose at 4.30 in the morning to build fires for the various kitchens was stopped. The privilege of having matches was also withdrawn from all patients.

There was no proper place for housing bulls, so three houses with yards have been constructed, and each bull has a house and yard, and can be out of doors each pleasant day.

The unsightly building known as the old power house at the Elms Group should be torn down. It was found that the original pipes which go underneath the roof are used as part of the steam line to heat buildings, and it will cost \$1,200 to place these underground. This has been asked for in our budget, and it is planned to eventually tear this building down. The windows and doors were in very bad condition, and these have all been repaired by patient labor, and the building is now used as a garage.

At the present time the Oaks Group is depending on one 4-inch pipe for its entire water supply. This, while sufficient for domestic purposes, is entirely inadequate in case of fire. The hydrants were found to be very few in number, poorly placed and some were second-hand when purchased. Consequently I have had a study made of the situation, and plans have been drawn, and an amount of \$45,000 is asked for in order that our buildings will be properly protected. Because of the friction in this 4-inch pipe to the Oaks Group a stream of water there cannot be projected over 10 feet in the air.

There was no system of checking the various night watches. Two old clocks were found which were immediately put into use, and the various night watches now call the main telephone operator half hourly. The sum of \$1,500 is asked to provide suitable watch clock system for this purpose.

Many buildings were found to be inadequately provided with fire-fighting equipment. Sixteen hundred and eighty dollars and forty-two cents were found to be available from a previous appropriation for fire protection, and this has been spent for piping, connections, hose, valves and racks, so that

inside standpipes can be installed in Pines A and Pines C, also in Elms A.

A great deal of grading has been done in the vicinity of the administration building and the rear of Willows A.

Our laundry equipment is entirely inadequate, and new equipment to the value of \$8,915 is asked for in the budget.

Pines C and Elms A have never been adequately heated, and the sum of \$15,264 is asked for in order that our patients may be kept in comfort in these buildings.

An X-ray machine is very badly needed, and the sum of \$1,542 is asked for this purpose.

Greenhouses are needed, not only to keep our wards supplied with plants and flowers, but to enable us to start our early vegetables, and a sum of \$7,958 is asked for in the budget.

At two of our largest groups we have no way of grinding meats and vegetables, and the sum of \$282 is asked for to provide power grinders in our service buildings.

The sum of \$500 is asked for to provide compartment steamers for the Pines kitchen.

The sum of \$704 is asked for to provide street lights for the new road leading to the Oaks Group.

The sum of \$4,106.50 is asked for to provide guards at Pines C.

The sum of \$3,025.72 is asked for to provide guards at Pines D.

The sum of \$5,096.06 is asked for to provide a building to house our canning equipment.

The building known as Oaks A is in very bad condition. The foundation has sunk, and the concrete floor of the day hall is very irregular. The wooden partitions are rotted about the water sections, and it will be necessary to rebuild these. It is planned to replace all woodwork with cement construction.

We have over fifty buildings. Only a few of these are properly graded. Many of the rest will require fills of 10 to 20 feet in order to grade them. We badly need roads of proper construction, also shrubs, trees and plants to beautify our grounds.

Our water supply has always been entirely inadequate. Each year there has been certain periods when it has been necessary

to curtail the use of water. An appropriation of \$105,000 was made several years ago to provide additional water supply, and a determined effort has been made this fall to insure the installation of a supply this coming year. The city of Worcester has co-operated with us to the point of extending their mains. The road for the pipe has been surveyed, and engineers are working on specifications for the bids. It is now expected that the actual work of laying the pipe will be begun by April 15, 1922.

The ice storm of the last few days of November ruined hundreds of our fruit and shade trees and badly injured others. The ice weighed down our light and telephone wires so that all our buildings were without electricity and telephones.

I wish to express my appreciation of the loyal and faithful service rendered by the employees and officers, and the generous support, counsel and consideration extended to me, in behalf of the hospital, by your Board.

Respectfully submitted,

HARLAN L. PAINE, M.D.

TREASURER'S REPORT.

To the Department of Mental Diseases.

I respectfully submit the following report of the finances of this institution for the fiscal year ending Nov. 30, 1921:—

CASH ACCOUNT.

Balance Dec. 1, 1920	\$4,122 67
--------------------------------	------------

Receipts.

Income.

Board of inmates:

Private	\$1,317 58
Reimbursements, insane	13,181 43
	\$14,499 01

Personal services:

Reimbursement from Board of Retirement	123 58
--	--------

Sales:

Food	\$2,281 71
Clothing and materials	210 86
Furnishings and household supplies	50
Medical and general care	123 19
Heat, light and power	333 33

Farm:

Cows and calves	\$449 36
Hides	14 70
Ice	51
Sundries	174 75
	639 32
Repairs, ordinary	102 34
	3,691 25

Miscellaneous:

Interest on bank balances	\$634 61
Rent	848 58
	1,483 19
	19,797 03

Other receipts:

Refunds of previous year	35 09
------------------------------------	-------

Receipts from Treasury of Commonwealth.

Maintenance appropriations:

Balance of 1920	\$34,382 41
Advance money (amount on hand November 30)	35,000 00
Approved schedules of 1921	455,370 92
	524,753 33

Special appropriations	9,352 22
	\$558,060 34

Total	\$558,060 34
-----------------	--------------

Payments.

To treasury of Commonwealth:

Institution income	\$19,797 03
Refunds, account of maintenance	285 33
Refunds of previous year	35 09
	—————

\$20,117 45

Maintenance appropriations:

Balance of schedules of previous year	\$38,505 08
Eleven months' schedules, 1921	\$455,370 92
Less returned	285 33
	—————
	455,085 59
November advances	27,295 62
	—————

520,886 29

Special appropriations:

Approved schedules	9,352 22
Balance Nov. 30, 1921:	
In bank	\$4,217 66
In office	3,486 72
	—————
Total	7,704 38
	—————
	\$558,060 34

MAINTENANCE.

Balance from previous year, brought forward	\$497 52
Appropriation, current year	529,800 00
	—————
Total	\$530,297 52
Expenses (as analyzed below)	512,642 14
	—————
Balance reverting to treasury of Commonwealth	\$17,655 38

Analysis of Expenses.

Personal services:

Harlan L. Paine, superintendent	\$750 00
Hiram L. Horsman, acting superintendent	2,380 00
Medical	6,731 29
Administration	11,608 57
Kitchen and dining-room service	14,668 33
Domestic	17,886 57
Ward service (male)	35,762 29
Ward service (female)	31,423 20
Industrial and educational department	2,600 51
Engineering department	28,132 26
Repairs	17,237 25
Farm	17,356 65
Stable, garage and grounds	1,837 70
	—————

\$188,374 62

Religious instruction:

Catholic	\$600 00
Hebrew	300 00
Protestant	400 00
	—————
Amount carried forward	1,300 00
	—————

\$189,674 62

<i>Amount brought forward</i>	\$189,674 62
-------------------------------	-----------	--------------

Travel, transportation and office expenses:

Advertising	. . . . .	\$41 00
Postage	. . . . .	450 20
Printing and binding	. . . . .	234 81
Printing annual report	. . . . .	169 26
Stationery and office supplies	. . . . .	1,269 86
Telephone and telegraph	. . . . .	1,213 94
Travel	. . . . .	1,679 09
		<hr/>
		5,058 16

Food:

Flour	. . . . .	\$14,033 11
Cereals, rice, meal, etc.	. . . . .	2,402 81
Bread, crackers, etc.	. . . . .	723 65
Peas and beans (canned and dried)	. . . . .	2,044 44
Macaroni and spaghetti	. . . . .	379 01
Potatoes	. . . . .	1,469 98
Meat	. . . . .	24,266 93
Fish (fresh, cured and canned)	. . . . .	4,824 39
Butter	. . . . .	4,159 63
Butterine, etc.	. . . . .	5,655 12
Cheese	. . . . .	2,023 03
Coffee	. . . . .	718 51
Coffee substitutes	. . . . .	754 96
Tea	. . . . .	550 30
Cocoa	. . . . .	30 42
Whole milk	. . . . .	12,211 11
Milk (condensed, evaporated, etc.)	. . . . .	182 64
Eggs (fresh)	. . . . .	4,995 86
Egg powders, etc.	. . . . .	84 48
Sugar (cane)	. . . . .	3,154 05
Fruit (fresh)	. . . . .	2,218 34
Fruit (dried and preserved)	. . . . .	4,059 79
Lard and substitutes	. . . . .	1,165 49
Molasses and syrups	. . . . .	539 12
Vegetables (fresh)	. . . . .	1,262 46
Vegetables (canned and dried)	. . . . .	542 78
Seasonings and condiments	. . . . .	1,115 49
Yeast, baking powder, etc.	. . . . .	326 50
		<hr/>
		95,894 40

Clothing and materials:

Boots, shoes and rubbers	. . . . .	\$6,659 09
Clothing (outer)	. . . . .	9,579 32
Clothing (under)	. . . . .	2,468 06
Dry goods for clothing	. . . . .	5,045 09
Hats and caps	. . . . .	582 75
Leather and shoe findings	. . . . .	244 55
Machinery for manufacturing	. . . . .	125 03
Socks and smallwares	. . . . .	1,562 73
		<hr/>
		26,266 62

Furnishings and household supplies:

Beds, bedding, etc.	. . . . .	\$14,671 27
Carpets, rugs, etc.	. . . . .	296 61
		<hr/>
<i>Amounts carried forward</i>	. . . . .	\$14,967 88
		\$316,893 80

<i>Amounts brought forward</i>	\$14,967 88	\$316,893 80
--------------------------------	-----------	-------------	--------------

Furnishings and household supplies — *Con.*

Crockery, glassware, cutlery, etc.	. . . . .	4,247 31
Dry goods and smallwares	. . . . .	259 40
Electric lamps	. . . . .	802 91
Fire hose and extinguishers	. . . . .	881 70
Furniture, upholstery, etc.	. . . . .	2,135 92
Kitchen and household wares	. . . . .	6,840 25
Laundry supplies and materials	. . . . .	2,722 15
Lavatory supplies and disinfectants	. . . . .	1,306 25
Machinery for manufacturing	. . . . .	28 05
Table linen, paper napkins, towels, etc.	. . . . .	2,817 74
		37,009 56

Medical and general care:

Books, periodicals, etc.	. . . . .	\$425 71
Entertainments, games, etc.	. . . . .	972 76
Funeral expenses	. . . . .	221 00
Gratuities	. . . . .	11 30
Ice and refrigeration	. . . . .	731 95
Laboratory supplies and apparatus	. . . . .	1,495 82
Medicines (supplies and apparatus)	. . . . .	1,895 03
Medical attendance (extra)	. . . . .	751 36
Patients boarded out	. . . . .	1,500 09
Return of runaways	. . . . .	135 25
Sputum cups, etc.	. . . . .	2 06
Tobacco, pipes, matches	. . . . .	2,020 17
		10,162 50

Heat, light and power:

Coal (bituminous)	. . . . .	\$23,032 84
Freight and cartage	. . . . .	28,319 44
Coal (screenings)	. . . . .	6,689 37
Freight and cartage	. . . . .	13,036 80
Coal (anthracite)	. . . . .	1,500 37
Freight and cartage	. . . . .	929 36
Oil	. . . . .	635 85
Operating supplies for boilers and engines	. . . . .	566 29
		74,710 32

Farm:

Bedding materials	. . . . .	\$1,127 56
Blacksmithing and supplies	. . . . .	511 02
Carriages, wagons and repairs	. . . . .	569 66
Dairy equipment and supplies	. . . . .	447 41
Fencing materials	. . . . .	142 73
Fertilizers	. . . . .	2,362 07
Grain, etc.	. . . . .	12,843 14
Hay	. . . . .	7,587 57
Harnesses and repairs	. . . . .	197 45
Horses	. . . . .	500 00
Cows	. . . . .	10 00
Other live stock	. . . . .	983 73
Rent	. . . . .	460 00
Road work and materials	. . . . .	20 00
Spraying materials	. . . . .	182 87
<i>Amounts carried forward</i>	. . . . .	\$27,945 21
		\$438,776 18

Amounts brought forward \$27,945 21 \$438,776 18

Farm—*Con.*

Stable and barn supplies	101 70
Tools, implements, machines, etc.	3,061 68
Trees, vines, seeds, etc.	1,261 15
Veterinary services, supplies, etc.	822 00
Lime	356 12
Dynamite	68 35
	—————
	33,616 21

Garage, stable and grounds:

Motor vehicles	\$2,455 83
Automobile repairs and supplies	2,996 96
Bedding and materials	117 50
Blacksmithing and supplies	55 17
Carriages, wagons and repairs	79 70
Grain	486 49
Hay	284 38
Harnesses and repairs	79 42
Horses	400 00
Road work and materials	251 81
Stable supplies	31 35
Tools, implements, machines, etc.	138 72
Trees, vines, seeds, etc.	20 10
Veterinary	11 00
	—————
	7,408 43

Repairs, ordinary:

Cement, lime, crushed stone, etc.	\$926 21
Electrical work and supplies	1,198 09
Hardware, iron, steel, etc.	1,692 94
Lumber, etc. (including finished products)	3,899 08
Paint, oil, glass, etc.	4,627 94
Plumbing and supplies	3,580 04
Roofing and materials	898 01
Steam fittings and supplies	1,805 00
Tents, awnings, etc.	68 70
Tools, machines, etc.	776 55
Boilers, repairs	599 10
DYNAMOS, repairs	31 78
Engines, repairs	208 69
	—————
	20,312 13

Repairs and renewals:

Flatwork ironer	\$6,800 00
Retubing one boiler	1,123 00
Repairing plumbing, Pines B	636 70
Repairing plumbing, Pines C	413 54
Replacing steam line between Pines B and C	418 71
Disinfector for laundry	1,785 00
Hood flues over steam kettles	543 25
Canning outfit	808 99
	—————
	12,529 19

Total expenses for maintenance \$512,642 14

SPECIAL APPROPRIATIONS.

Balance Dec. 1, 1920	\$108,551 29
Appropriations for current year	10,400 00
<hr/>	<hr/>
Total	\$118,951 29
Expended during the year (see statement below)	\$9,103 82
Reverting to treasury of Commonwealth	61
<hr/>	<hr/>
Balance Nov. 30, 1921, carried to next year	9,104 43
<hr/>	<hr/>
Balance Nov. 30, 1921, carried to next year	\$109,846 86

OBJECT.	Act or Resolve. e. t.	Whole Amount.	Expended during Fiscal Year.	Total Expended to Date.	Balance at End of Year.
Water supply	Ch. 313, Acts 1917	\$105,000 00	\$63 14	\$7,578 15	\$97,421 85
Coal trestle and track scales ¹	Ch. 50, Res. 1918	10,000 00	2,540 07	9,532 27	467 73
Hydrotherapeutic equipment	Ch. 50, Res. 1918	6,000 00	5,482 22	5,482 22	517 78
Additional fire protection	Ch. 153, Acts 1919	6,000 00	640 92	4,960 50	1,039 50
Vegetable cellar	Ch. 211, Acts 1919	3,411 50	377 47	3,410 89	61*
Cow barn	Ch. 203, Acts 1921	10,400 00	—	—	10,400 00
		\$140,811 50	\$9,103 82	\$30,964 03	\$109,847 47

¹ Expended by Institution during year, \$2,788.47; less refund through Commission of Mental Diseases, \$248.40; total, \$2,540.07.

* Balance reverting to treasury of the Commonwealth

Balance carried to next year

Total as above	—	—	—	—	\$0 61
					109,846 86
					<u>\$109,847 47</u>

RESOURCES AND LIABILITIES.

Resources.

Cash on hand	\$7,704 38
November cash vouchers (paid from advance money):	
Account of maintenance	27,295 62
	<hr/>
\$35,000 00	
Due from treasury of Commonwealth from available appropriation, account of November, 1921, schedule	22,556 55
	<hr/>
	\$57,556 55

Liabilities.

Outstanding schedules of current year:

Schedule of November bills	\$57,556 55
	<hr/>
	\$57,556 55

PER CAPITA.

During the year the average number of inmates has been 1,446.98.

Total cost for maintenance, \$512,642.14.

Equal to a weekly per capita cost of \$6.8131.

Receipt from sales, \$3,691.25.

Equal to a weekly per capita of \$0.0490.

All other institution receipts, \$16,105.78.

Equal to a weekly per capita of \$0.2140.

Net weekly per capita cost, \$6.5501.

Respectfully submitted,

SUSIE G. WARREN,

Treasurer.

Examined and found correct as compared with the records in the office of the Auditor of the Commonwealth.

ALONZO B. COOK,
Auditor.

INMATES' FUND.

Cash on hand Dec. 1, 1920	\$4,892 72
Received of inmates	1,994 34
Interest, Worcester Bank and Trust Company	47 18
Interest, Mechanics Savings Bank	100 10
	<hr/>
	\$7,034 34
 Cash refunded patients	\$1,264 00
Paid to Department of Mental Diseases	71 01
Interest paid to State Treasurer	42 43
Balance, Worcester Bank and Trust Company, \$3,245.65; Mechanics Savings Bank, \$2,300.10; office, \$110.15 . . .	5,656 90
	<hr/>
	\$7,034 34

VALUATION.

Nov. 30, 1921.

REAL ESTATE.

Land (908 acres)	\$28,426 50
Buildings	1,245,383 39
	<hr/>
	\$1,273,809 89

PERSONAL PROPERTY.

Travel	\$591 45
Food	18,427 08
Clothing and materials	29,070 95
Furnishings and household supplies	90,679 50
Medical and general care	3,566 45
Heat, light and power	37,943 22
Farm	43,623 36
Garage, stable and grounds	—
Repairs	15,090 14
	<hr/>
	\$238,992 15

SUMMARY.

Real estate	\$1,273,809 89
Personal property	238,992 15
	<hr/>
	\$1,512,802 04

STATISTICAL TABLES

AS ADOPTED BY AMERICAN PSYCHIATRIC ASSOCIATION

PREScribed BY MASSACHUSETTS DEPARTMENT OF MENTAL DISEASES

STATISTICAL TABLES.

TABLE 1.—General Information.

1. Date of opening institution:	Oct. 23, 1877.
2. Type of institution:	State.
3. Hospital plant:	
Real estate, including buildings	\$1,273,809 89
Personal property	238,992 15
 Total	 \$1,512,802 04

Total acreage, 908.

Acreage under cultivation during year, 180.25.

4. Medical service:		Men.	Women.	Total.
Superintendent	.	1	—	1
Assistant superintendent	.	1	—	1
Assistant physicians	.	5	1	6
 Total	.	7	1	8
5. Employees:		Men.	Women.	Total.
Graduate nurses	.	—	13	13
Other nurses and attendants	.	63	51	114
Social worker	.	—	1	1
All other employees	.	81	70	151
 Total	.	144	135	279
6. Percentage of patients employed during year	.	Men.	Women.	Total.
		49	38	44

TABLE 2.—Financial Statement.

See treasurer's report for data requested under this table.

GRAFTON STATE HOSPITAL.

[Dec.]

TABLE 3.—Movement of Patient Population for the Year ending Sept. 30, 1921.

	TEMPORARY CARE.				INSANE.				TOTAL ON BOOKS.			
	Males.		Females.		Males.		Females.		Males.		Females.	
1. Patients on books of institution Sept. 30, 1920	-	-	709	744	709	744	1,453	1,453
Admissions during year:	10	15	10	5	15	15
(a) First admissions	1	1	3	5	4	2	6	6
(b) Readmissions	1	1	13	20	14	7	21	21
Total admissions	-	-	108	181	108	73	181	181
(c) Transferred from other institutions for the insane	-	-	121	201	122	80	202	202
2. Total received during year	1	1	830	824	831	824	1,655	1,655
3. Total under treatment during year	-	-	-	-	-	-	-	-
Discharged from books during year:
(a) As recovered	-	-	-	-	-	-	-	-
(b) As improved	-	-	10	8	18	10	8	18
(c) As unimproved	1	1	3	11	9	3	12	12
(d) As not insane	-	-	-	-	-	-	-	-
(e) Transferred to other institutions for the insane	-	-	5	31	36	5	31	36
(f) Died during year	-	-	17	22	39	17	22	39
4. Total discharge from books during year	-	-	40	64	104	41	64	105
5. Patients remaining on books of institution Sept. 30, 1921	-	-	790	760	1,550	790	760	1,550
6a. Average daily number of patients on books during year	-	-	736.21	750.55	1,486.76	736.21	750.55	1,486.76
6b. Average daily number of patients actually in institution during year	-	-	696.11	728.82	1,424.93	696.11	728.82	1,424.93
7a. Average daily number of patients in family care	-	-	39.10	13.73	52.83	13.73	8	9
7b. Average daily number of patients on visit and escape	-	-	1	1	1	1	-	52.83
8. Number of voluntary patients admitted during year	-	-	-	-	-	-	1	1
9. Number of temporary-care cases admitted during year	-	-	-	-	-	-	-	-
10. Number of patients actually remaining in institution Sept. 30, 1921	-	-	-	-	-	-	-	-
State	756	743	1,499	756	743	1,499
Reimbursing	738	719	1,457	738	719	1,457
Private	14	23	37	14	23	37
State	4	1	5	4	1	5
Private	1	8	9	1	8	9
11. Number of patients in family care Sept. 30, 1921	-	-	-	-	-	-	831	824
12. Number of different persons within the year	-	-	-	-	-	-	-	-
13. Number of different persons admitted from the community	-	-	1	1	1	1	1	1
14. Number of different persons dismissed exclusive of transfer	-	-	1	1	1	1	1	1
15. Number of non-insane patients or inmates in institution at end of institution year	-	-	35	33	33	68	36	69

TABLE 4.—*Nativity of First Admissions and of Parents of First Admissions.*

NATIVITY.	PATIENTS.			PARENTS OF MALE PATIENTS.			PARENTS OF FEMALE PATIENTS.		
	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.
Albania	1	-	1	1	1	2	-	-	-
Austria	-	-	-	-	-	-	-	1	1
Canada	1	-	1	1	1	2	-	-	-
England	-	-	-	1	1	2	1	1	2
Germany	-	1	1	-	-	-	2	1	3
Ireland	-	-	-	-	-	-	1	1	2
Italy	1	-	1	2	2	4	-	-	-
Sweden	1	-	1	1	1	2	-	-	-
United States	6	4	10	4	5	9	-	-	-
Total	10	5	15	10	11	21	4	4	8

TABLE 5.—*Citizenship of First Admissions.*

	Males.	Females.	Totals.
Citizens by birth	6	4	10
Citizens by naturalization	1	1	2
Aliens	3	-	3
Total	10	5	15

TABLE 6.—*Psychoses of First Admissions.*

PSYCHOSES.	PATIENTS.			PARENTS OF MALE PATIENTS.			PARENTS OF FEMALE PATIENTS.		
	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.
Epileptic	8	2	10
Clouded	1	1	1	-	1	-	-	-
Deterioration	2	2	7	2	9	-	-	-
Not insane	2	1	3
With mental deficiency	-	2	2
Total	10	5	15

TABLE 7.—*Race of First Admissions classified with Reference to Psychoses.*

RACE.	TOTAL.			PSYCHOSES.								
				EPILEPTIC.			NOT INSANE.			WITH MENTAL DEFICIENCY.		
	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.
Albanian	1	-	1	1	-	1	-	-	-	-	-	-
English	4	1	5	3	1	4	1	-	1	-	-	-
German	-	1	1	-	1	1	-	-	-	-	-	-
Irish	1	1	2	1	-	1	-	-	-	-	1	1
Italian	2	-	2	1	-	1	1	-	1	-	-	-
Mixed	-	1	1	-	-	-	-	-	-	-	1	1
Negro	1	-	1	1	-	1	-	-	-	-	-	-
Polish	-	1	1	-	-	-	-	1	1	-	-	-
Swedish	1	-	1	1	-	1	-	-	-	-	-	-
Total	10	5	15	8	2	10	2	1	3	-	2	2

TABLE 8.—*Age of First Admissions classified with Reference to Principal Psychoses.*

PSYCHOSES.	TOTAL.		15-20.		20-25.		25-30.		30-35.		40-45.		45-50.		50-55.		60-65.		65-70.		80-85.	
	Males.	Females.																				
Epileptic . . .	8	2	10	—	—	1	—	—	2	—	1	—	2	—	—	—	—	—	1	—	—	1
Not insane . . .	2	1	3	2	—	2	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—
With mental deficiency.	—	—	2	2	—	1	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—
Total . . .	10	5	15	2	1	3	1	2	3	—	—	2	—	1	—	1	—	1	1	—	1	—

TABLE 9.—*Degree of Education of First Admissions classified with Reference to Psychoses.*

		None.		Reads and Writes.		Common School.		High School.		Totals.	
		Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Totals.
Psychoses.											
Epileptic	8	2	10	1	1	-	1	7
Not insane	2	1	3	-	-	2	-	1
With mental deficiency	-	2	2	-	1	-	-	1
Total	10	5	15	1	2	3	3	9
								1	-	1	1

TABLE 10. — *Environment of First Admissions classified with Reference to Principal Psychoses.*

PSYCHOSES.	TOTAL.			URBAN.		
	Males.	Females.	Totals.	Males.	Females.	Totals.
Epileptic	8	2	10	8	2	10
Not insane	2	1	3	2	1	3
With mental deficiency	-	2	2	-	2	2
Total	10	5	15	10	5	15

TABLE 11. — *Economic Condition of First Admissions classified with Reference to Principal Psychoses.*

PSYCHOSES.	TOTAL.			DEPENDENT.			MARGINAL.			COMFORTABLE.		
	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.
Epileptic	8	2	10	2	-	2	4	2	6	2	-	2
Not insane	2	1	3	2	1	3	-	-	-	-	-	-
With mental deficiency	-	2	2	-	2	2	-	-	-	-	-	-
Total	10	5	15	4	3	7	4	2	6	2	1	2

TABLE 12. — *Use of Alcohol by First Admissions classified with Reference to Principal Psychoses.*

PSYCHOSES.	TOTAL.			ABSTINENT.			TEMPERATE.		
	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.
Epileptic	8	2	10	1	2	3	7	-	7
Not insane	2	1	3	2	1	3	-	-	-
With mental deficiency	-	2	2	-	2	2	-	-	-
Total	10	5	15	3	5	8	7	-	7

TABLE 13.—*Marital Conditions of First Admissions classified with Reference to Principal Psychoses.*

PSYCHOSES.	TOTAL.			SINGLE.			MARRIED.			SEPARATED.			WIDOWED.		
	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.
Epileptic	8	2	10	3	-	3	4	2	6	-	-	-	1	-	1
Not insane	2	1	3	2	1	3	-	-	-	-	-	-	-	-	-
With mental deficiency	-	2	2	-	2	2	-	-	-	-	-	-	-	-	-
Total	10	5	15	5	3	8	4	2	6	-	-	-	1	-	1

TABLE 14.—*Psychoses of Readmissions.*

PSYCHOSES.	Males.			Females.			Totals.			Males.			Females.			Totals.		
Dementia præcox													1	-		1		
Simple				1						1								
Epileptic											1	2		3				
Clouded					1					1								
Deterioration						1		1		2								
Not insane											1	-		1				
Mental deficiency without psychoses				1						1								
Total											3	2		5				

TABLE 15. — *Discharge of Patients classified with Reference to Principal Psychoses and Condition on Discharge.*

PSYCHOSES.	TOTAL.			IMPROVED.			UNIMPROVED.		
	Males.	Females.	Totals.	Males:	Females.	Totals.	Males.	Females.	Totals.
Alcoholic	1	-	1	1	-	1	-	-	-
Dementia præcox	10	3	13	6	1	7	4	2	6
Epilepsy	1	4	5	1	3	4	-	1	1
Involution melancholia	-	2	2	-	2	2	-	-	-
Manic depressive	1	1	2	1	1	2	-	-	-
Not insane	3	1	4	-	1	1	3	-	3
Senile	1	-	1	1	-	1	-	-	-
With mental deficiency	1	-	1	-	-	-	1	-	1
Total	18	11	29	10	8	18	8	3	11

TABLE 16.—*Causes of Death of Patients with Reference to Principal Psychoses.*

CAUSES OF DEATH.	TOTAL.	ALCOHOLIC.	DEMENTIA PRÆCOX.	EPILEPSY.	GENERAL PARALYSIS OF THE INSANE.	WITH MENTAL DEFICIENCY.	SENIILE.	Totals.	PSYCHOSES.		
									Males.	Females.	
<i>General Diseases.</i>											
Cancer of the breast	.	.	.	1	1	1	1	1	1	1	1
Tuberculosis of the lungs	.	.	.	1	1	1	1	1	1	1	1
<i>Diseases of the Nervous System.</i>											
Acute ascending paralysis	.	.	.	1	1	1	1	1	1	1	1
Cerebral hemorrhage	.	.	.	2	1	1	1	1	1	1	1
Epilepsy	.	.	.	5	1	1	1	1	1	1	1
General paralysis of the insane	.	.	.	1	1	1	1	1	1	1	1
<i>Diseases of the Circulatory System.</i>											
Acute pericarditis	.	.	.	1	1	1	1	1	1	1	1
Cardiac lesion	.	.	.	1	1	1	1	1	1	1	1
Chronic myocarditis with dilatation	.	.	.	1	1	1	1	1	1	1	1
Chronic myocarditis with general arteriosclerosis	.	.	.	1	1	1	1	1	1	1	1
Valvular diseases of heart	.	.	.	1	1	1	1	1	1	1	1
<i>Diseases of the Respiratory System.</i>											
Broncho-pneumonia	.	.	.	3	1	1	1	1	1	1	1
Lobar pneumonia	.	.	.	1	1	1	1	1	1	1	1
Lobar pneumonia with empyema	.	.	.	1	1	1	1	1	1	1	1
Pleurisy with empyema	.	.	.	1	1	1	1	1	1	1	1
Pulmonary tuberculosis	.	.	.	11	11	11	11	11	11	11	11
									9	9	9

Diseases of the Digestive System.																				
Obstruction of intestines	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-
Perforation of the esophagus from foreign body (bone)	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-
Peritonitis	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-
Asphyxiation during an epileptic seizure	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-
Fracture of the spine followed by pyelo-nephritis	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-
Ill-defined Diseases.																				
Sudden death, unknown	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-
Total	17	22	39	3	2	5	4	15	19	9	3	12	-	1	1	-	1	1	1	

TABLE 17.—*Age of Patients at Time of Death classified with Reference to Principal Psychoses.*

TABLE 17.—*Age of Patients at Time of Death classified with Reference to Principal Psychoses—Concluded.*

PSYCHOSES.	YEARS.																				
	50-55.	55-60.	60-65.	65-70.	70-75.	75-80.															
Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Totals.	
Alcoholic	—	1	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dementia praecox	—	1	1	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Epilepsy	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General paresis of the insane	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
With mental deficiency	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Senile	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	2	2	2	4	—	2	2	2	2	1	2	3	—	2	2	2	1	2	3	—

TABLE 18.—*Total Duration of Hospital Life of Patients dying in Hospital classified according to Psychoses.*

TABLE 18.—*Total Duration of Hospital Life of Patients dying in Hospital classified according to Psychoses—Concluded.*

	PSYCHOSES.	YEARS.											
		10-15.	15-20.	20-25.	25-30.	35-40.	50-55.						
		Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	
Alcoholic	•	•	•	•	•	—	—	1	—	—	—	—	—
Dementia praecox	•	•	•	•	•	—	1	1	2	2	—	1	1
Epilepsy	•	•	•	•	•	—	1	1	—	—	—	—	—
General paresis of the insane	•	•	•	•	•	—	—	—	—	—	—	—	—
With mental deficiency	•	•	•	•	•	—	—	—	—	—	—	—	—
Senile	•	•	•	•	•	—	—	—	—	—	—	—	—
Total	•	•	•	•	•	1	2	3	—	3	1	2	1

TABLE 19.—*Family-care Department.*

	Males.	Females.	Totals.
Remaining Sept. 30, 1920	1	8	9
Whole number of cases within the year	1	8	9
Dismissed within the year	—	—	—
Returned to the institution	—	—	—
Remaining Sept. 30, 1921	1	8	9
Supported by State	1	8	9
Number of different persons within the year	1	8	9
Number of different persons dismissed	—	—	—
Daily average number	1	8	9
State	1	8	9



